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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,864	12/21/2001	Sridhar Ranganathan	KCC-16,282	4026
35844	7590	05/10/2006	EXAMINER	
PAULEY PETERSEN & ERICKSON 2800 WEST HIGGINS ROAD HOFFMAN ESTATES, IL 60195			COLE, ELIZABETH M	
			ART UNIT	PAPER NUMBER

1771

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/036,864

Applicant(s)

RANGANATHAN ET AL.

Examiner

Elizabeth M. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 18,22-30,32-34,52,56,58-64,66-68,71,72,75 and 76 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18,22-30,32-34,52,56,58-64,66-68,71,72,75 and 76 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

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1. Claims 18, 22-30, 32-34, 52, 56, 58-64, 66-68, 71-72, 75-76 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification at page 19 does not provide support for the limitation that the composite absorbent web has an edge compression of 0.29 g/gsm or less, a saturated capacity of above about 20.4 g/g or greater and a wet tensile strength of greater than about 1.16 g/gsm/in or greater. The specification at page 19 provides support for the composite having density of 0.22 g/cc; saturated capacity of 20.4 g/g, wet tensile in g/gsm/in of 1.16 and edge compression g/gsm of 0.29 but does not provide support for the use of these values as a maximum, as in the case of the edge compression, or a minimum as in the case of the saturated capacity and wet tensile strength. The text cited by Applicant at page 19 compares the edge compression, saturated capacity and wet tensile strength of the product exemplified in the table on page 19 to the prior art products it is compared to, but does not state that these are minimum or maximum values respectively, and does not indicate that any value either higher or lower than these values was contemplated as being part of the invention.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 18, 22-25, 29-30 32-33, 52, 56, 58-59, 63-64, 66-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Assarsson et al, U.S. Patent No.

3,901,236 in view of Dodge II et al, U.S. Patent No. 5,994,615 and Cook et al U.S. Patent No. 6,562,743. Assarsson et al discloses a superabsorbent particle which is coated with a cellulosic material such as a cellulosic fiber. See col. 3, line 41 – col. 4, line 46. With regard to the limitation that the superabsorbent is “particulate-coated”, Applicant’s specification defines particulates as including fibers. See page 11, lines 10-17 of the instant specification. Therefore, the new limitation is met by the disclosure of Assarsson. The indicated allowance of claims 30 and 64 is withdrawn in view of the amendment to those claims which broaden them to recite 2 weight percent “or more” of binder and ninety eight weight percent “or less” of superabsorbent. The addition of “or more” and “or less” necessitates the rejection of those claims for the reasons of record. The superabsorbents may be incorporated into airlaid absorbent pads. See col. 7, lines 21-50. The individual particles may comprise up to about 80% fibers to 10% on the superabsorbent particles. See col. 10, lines 17-26. With regard to limitations regarding the absorbent capacity of the composite absorbent web, although Assarsson et al does not disclose the claimed values, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have optimized the absorbency capacity of the web through the process of routine experimentation by optimizing factor such as the amount and placement of the superabsorbent particles, the choice of the other components of the absorbent pad, etc. Assarsson et al differs from the claimed invention because it does not disclose the presence of binders such as binder fibers in the airlaid pads. Dodge teaches at col. 12, lines 5-25 and col. 14, lines 9-16, that suitable absorbent materials including airlaid webs may include up to about 10 percent

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of a binder component based on the weight of the web. Dodge teaches that the binder component may comprise a thermoplastic polymeric fiber such as a polyolefin fiber or a bi-component fiber such as polyethylene/ polyethylene terephthalate fibers. See col. 16, lines 10-22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the binders of Dodge in the airlaid web of Assarsson et al, motivated by the expectation that these would enhance the absorbency and strength of Assarsson absorbent web. Neither Assarsson nor Dodge teach the particularly claimed amount of superabsorbent. Cook teaches that from 20-80% of superabsorbent particles can be added to fibers to form an absorbent structure for use in manufacturing an absorbent article. See col. 8, lines 23-30. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed 20-80 % superabsorbents in the absorbent core of Assarsson, motivated by the teaching of Cook et al that this amount produces excellent results in absorbent structures. With regard to the claimed edge compression, saturated capacity and wet tensile strength, while Assarsson does not disclose the claimed values, it would have been obvious to one of ordinary skill in the art to optimize the edge compression, strength and liquid holding capacity of the absorbent material in order to arrive at a material having the desired durability and efficiency.

4. Claims 26-28, 60-62, 71-72, 75-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Assarsson in view of Dodge and Cook as applied to claims above, and further in view of Radwanski et al, U.S. Patent No. 4,939,016. Neither Assarsson nor Dodge teaches incorporating elastomeric fibers or meltblown fibers into the airlaid

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absorbent web or employing additional layers with the airlaid layer. Radwanski et al teaches that meltblown elastomeric fibers may be incorporated into airlaid webs in order to enhance the aesthetic properties of the web by producing a more cloth-like product. See col. 5, lines 9-27 and col. 6, lines 1-27, col. 7, lines 3-57. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated elastomeric meltblown fibers into the absorbent web of Assarsson, motivated by the expectation that this would enhance the aesthetic properties of the web. Radwanski teaches that additional layers may be added to the web, such as col. 8, line 51 – col. 9, line 26, in order to enhance and /or add additional properties to the fabric. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have included additional layer such as those taught by Radwanski into the material of Assarsson, motivated by the expectation that additional properties could be added to the fabric, or that existing properties could be enhanced by the additional layers.

5. Applicant's arguments filed 3/3/06 have been fully considered but they are not persuasive.

6. With regard to the new matter rejection, while the claims have been amended, a new matter rejection is still set forth above, because the specification at page 19 does not provide support for the particular values of edge compression, saturated capacity and tensile strength claimed, since the specification sets forth values for a single embodiment, not minimum or maximum values as claimed.

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7. Applicant argues that there would have been no motivation to employ the binder of Dodge in the fast-absorbing airlaid of Assarsson because the SAP in Dodge is a slow acting absorbent. However, the rejection as set forth above does not state that it would have been obvious to have incorporated the SAP of Assarsson into the Dodge structure, but rather to include the binder fibers taught by Dodge into the absorbent core of Assarsson in order to strengthen the absorbent core of Assarsson. Applicant argues that there is no motivation to employ the binder fibers of Dodge in the fast absorbing airlaid material of Assarsson because the SAP in Dodge is a slow rate SAP while in Assarsson the SAP is a fast rate SAP. However, whether the SAPs differ would not control whether or not one of ordinary skill in the art of fibrous absorbent cores, diapers and hygiene articles would have been motivated to add binder fibers to the core of Assarsson. Dodge teaches that the binders can be added to airlaid nonwoven absorbent components for use in hygiene materials. Assarsson is drawn to an absorbent airlaid nonwoven which is used in hygiene materials. Whether the other components in Dodge are identical to those in Assarsson is not the issue. The issue is whether the person of ordinary skill in the art would have been motivated to include the binder of Dodge into the airlaid nonwoven of Assarsson. Since Dodge teaches that airlaid nonwoven absorbent hygiene materials can further comprise the binder in the claimed amount, it is the examiner's position that the addition of such binder fibers would have been obvious to one of ordinary skill in the art motivated by the expectation that this would enhance the strength and integrity of the airlaid of Assarsson. With regard to the samples shown on page 19, Applicant argues that there is no motivation to

expect that a material having a binder would have a greater edge compression than the sample which does not have the binder. However, it is noted initially that samples 2 and 3 are not drawn to the instant invention since they do not comprise the coated SAP. Additionally, there does not have to be a motivation or recognition that an additional property will be changed by the presence of the binder, but instead, there only has to be a motivation within the references to add the binder. Here the motivation is found in the Dodge reference which discloses an airlaid nonwoven which comprises SAP and which also teaches that binders in the amount and type claimed can also be employed in order to enhance the strength and integrity of the airlaid.

8. Applicant argues that there is no suggestion in Cook that would lead a person of skill in the art to modify the materials in either Assarsson and/ or Dodge. However, since Cook teaches incorporating SAPs into absorbent materials in an amount of 20-80%, it would have been obvious to one of ordinary skill in the art to have employed this amount of SAPs in the absorbent composite of Assarsson. Applicant argues that there is nothing that would lead a person of ordinary skill in the art to achieve a composite having exceptional flexibility and saturated capacity. However, it is not necessary that the motivation to combine be the same as Applicant's motivation. Cook teaches suitable amounts of SAP which can be incorporated into fibrous absorbent composites. Therefore, the person of ordinary skill in this art would have been motivated to employ the particular amounts of SAP taught by Cook in the absorbent fibrous material of Assarsson, motivated by the teaching of Cook that these values produced suitable absorbent materials.



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9. With regard to Radwanski, Applicant argues that Radwanski does not teach incorporating the elastomeric fibers containing webs into absorbent webs which comprise a binder, a coated SAP and have the claimed properties. However, as set forth above, Radwanski teaches the benefits of incorporating elastomeric fiber-containing webs into absorbent materials in order to impart additional properties to the absorbent material. Therefore, the rejection is maintained.

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

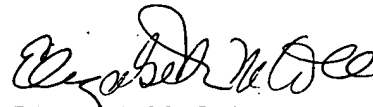
Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

A handwritten signature in black ink, appearing to read "Elizabeth M. Cole", is positioned above the printed name.

Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c